

REMARKS

This Application has been carefully reviewed in light of the final Office Action mailed July 14, 2008 (“Office Action”). Claims 1-43 are pending in the present application, Claims 1-24 stand rejected and Claims 25-43 are withdrawn from consideration.

Section 103 Rejections

Claims 1-7, and 9 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 4,758,344 to Wildenauer (“*Wildenauer*”) in view of U.S. Patent No. 4,668,388 to Dibble, et al (“*Dibble*”) or U.S. Patent No. 4,952,230 to Norlund (“*Norlund*”) taken further in view of U.S. Patent No. 4,230,676 to Taylor, et al. (“*Taylor*”). Claim 8 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Wildenauer* in view of *Dibble* or *Norlund* and *Taylor* taken further in view of U.S. Patent 4,962,034 to Khan (“*Khan*”). Claim 10 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Wildenauer* in view of *Dibble* or *Norlund* and *Taylor* taken further in view of U.S. Patent 5,591,635 to Young, et al. (“*Young*”) and U.S. Patent No. 3,973,043 to Lynn (“*Lynn*”). Claim 11 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Wildenauer* in view of *Dibble* or *Norlund* and *Taylor* taken further in view of U.S. Patent 4,317,670 to Khoroshavin et al. (“*Khoroshavin*”). Claims 12-14, 19, 20, and 22 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Wildenauer* in view of *Dibble* or *Norlund* and *Taylor* taken further in view of Japanese Patent JP 08-245285 to Furuta (“*Furuta*”). Claim 15 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Wildenauer* in view of *Dibble* or *Norlund*, *Taylor*, and *Furuta* taken further in view of German Patent No. DE2057413 to Still (“*Still*”). Claims 16-18 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Wildenauer* in view of *Dibble* or *Norlund*, *Taylor*, and *Furuta* taken further in view of EP Patent No. EP 0 673 901 to Smit (“*Smit*”). Claim 21 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Wildenauer* in view of *Dibble* or *Norlund*, *Taylor*, and *Furuta* taken further in view of *Khan*. Claim 23 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Wildenauer* in view of *Dibble* or *Norlund*, *Taylor*, and *Furuta* taken further in view of *Young* and *Lynn*. Claim 24 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Wildenauer* in view of *Dibble* or *Norlund*, *Taylor*, and *Furuta* taken further in view of *Khoroshavin*. Applicants traverse these rejections.

Independent Claim 1 should be allowed over the proposed combination of *Wildenauer*, *Dibble* or *Norlund*, and *Taylor* because the proposed combination would render *Wildenauer* “unsatisfactory for its intended purpose.”¹ Clearly, one would not be motivated to combine references in a manner that would make the references unsatisfactory for their intended purpose. Accordingly, there is no suggestion or motivation to make the proposed combination. There are at least two improper combinations proposed by the PTO.

First Improper Combination

First, the PTO asserts that it would have been obvious to combine *Taylor*’s lime slurry input feature with *Wildenauer*. However, this proposed combination would render inoperable *Wildenauer*’s ability to remove liquid flow-off 11 from trough 21. Specifically, *Taylor* describes a conduit, which serves a two-fold purpose: (1) as an evacuator to withdraw fluid, and (2) as an injector to inject fluid to the pile. With reference to FIGURE 2, *Taylor*’s conduits moves vertically with the pile. The vertical offset of the *Taylor*’s conduit would render inoperable *Wildenauer*’s ability to remove liquid flow-off 11. That is, for example, with the *Taylor*’s conduit in a vertical position, liquid flow off from the pile could not be captured as *Wildenauer*’s system is designed to do. Additionally, it is unclear how the use of *Taylor*’s conduit with this two-fold purpose could be combined with any reference in which there is alleged disclosure of a “drain pipe disposed with the gravel layer.” That is, *Taylor*’s drain pipe, the conduit, is always vertically offset with the pile and could not be disposed within a gravel layer.

In response to arguments similar to the above, the PTO indicated the following:

Taylor et al. was relied upon to evidence that it is known in the art to supply a pile of organic material that is subjected to microbiological degradation with a lime slurry to control the pH of the biodegradation process. The reference of *Wildenauer* already includes a distribution system (10) for injecting fluids into the biomass material. One of ordinary skill in the art would recognize that the lime slurry can be injected into the biomass using the existing injection system (10) . . .

(Office Action at 14-15). However, *Taylor* and *Wildenauer* cannot be combined in the manner suggested by the PTO. The *Wildenauer* existing injection system (10) is comprised of “[w]atering pipes with a plurality of spray openings . . . provided for supplying a leaching

¹ See MPEP 2143.01 (“If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.” (citing *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)).

liquid into the tower.” (Col. 3, ll. 62-64). *Wildenauer* further describes that “[t]he leaching liquid is primarily water supplied from an overflow 15 in a solid bed reactor.” (Col. 3, ll. 64-66). Without applicant’s disclosure in hand, it would be hard to imagine how one might modify the *Wildenauer* existing injection system (10) to inject both leaching liquid from the solid bed reactor and lime from a second source. Any such modification would destroy the functionality of *Wildenauer*, which requires the existing injection system 10 to operate in a “substantially closed circuit.” (Col. 2, ll. 63-64).

The PTO previously argued that, in light of *Taylor*, it would have been obvious “to provide the system of the primary reference [*Wildenauer*] with a lime input device for the known and predictable result of providing an art recognized means for controlling the pH within the biomass and improving the composting conditions within the biomass treatment system” (Office Action at 4) (emphasis added). However, the PTO has failed to identify where this proposed “lime input device” exists in the prior art. As discussed above, one cannot use the *Taylor* lime input device without destroying the functionality of *Wildenauer*. In addition, one cannot use *Wildenauer*’s existing injection system (10) for injecting lime because *Wildenauer* is only designed to inject water supplied from a solid bed reactor and not also inject lime slurry from a second source. Thus, the PTO has failed to establish any suggestion or motivation to combine the lime injection system from *Taylor* with *Wildenauer* because doing so would destroy the functionality of *Wildenauer*.

In the alternative, if the PTO argues that it is only borrowing a portion of *Taylor*’s disclosure (namely, only the lime slurry feature but not the means for injecting the lime slurry or extracting the lime slurry), Applicants remind the PTO that “[i]t is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.” *In re Hedges*, 783 F.2d 1038, 1041, 228 USPQ 685, 687 (Fed. Cir. 1986) (emphasis added). Rather, “the prior art as a whole must be considered. The teachings are to be viewed as they would have been viewed by one of ordinary skill.” *Id.* (emphasis added).

Second, the PTO suggests combining either *Dibble* or *Norlund*'s pipes to *Wildenauer*. However, this proposed combination would render inoperable *Wildenauer*'s ability to wash water soluble organic substances and soluble heavy metal salts out of the refuse in the tower 1 and collect liquid flow-off after the liquid has served its purpose. *See, e.g., Wildenauer*, Col. 4, ll. 1-5. With regards to *Norlund*, a main pipe 1 is disclosed which is connected to an air supply. This main pipe serves a purpose of blowing air into a pile as opposed to receiving liquid. Thus, if *Norlund*'s main pipe were used, *Wildenauer* could no longer collect liquid flow-off.

With regards to *Dibble*, a water removal means is described for use in a sludge dewatering process. Specifically, *Dibble* describes a vacuum that can be applied to speed up dewatering of a sludge. In other words, *Dibble removes* water of a sludge (*Dibble* does not want the water in the pile) whereas *Wildenauer applies* liquid to an organic waste (*Wildenauer* wants fluid in the pile) and simply collects the applied fluid after it has served its useful purpose. Accordingly, *Dibble*'s forceful water removal process (as opposed to a collection process of *Wildenauer*) would inhibit *Wildenauer*'s purpose of washing water soluble organic substances and soluble heavy metal salts out of the refuse in the tower.

In response to arguments similar to the above concerning *Dibble* or *Norlund*'s pipes, the PTO simply provided the above argument quoted *supra* at Page 12 and then indicated: “[t]he same holds true when combining the teachings of either the references of *Dibble* or *Norlund* with the reference of *Wildenauer* and/or the additional tertiary references as set forth in the prior art rejections of record.” Office Action at 15. Applicants do not know how this was responsive to the prior argument. Accordingly, Applicants maintain that the proposed combination was improper.

For at least the above additional reasons, Applicants submit that Independent Claim 1 and its dependents should be allowed. Independent Claim 12 and its dependents should be allowed for analogous reasons.

Notwithstanding the above, Independent Claim 1 should also be allowed because the combination of *Wildenauer*, *Dibble* or *Norlund*, and *Taylor* fails to disclose, teach, or suggest “a pump operable to circulate water through the biomass pile by delivering water to the distribution pipe and receiving water from the drain pipe after it has traveled through the biomass pile.” The PTO relies upon *Wildenauer*'s pumps 22, 24, and 15 as disclosing this feature, but this is incorrect. *Wildenauer* describes pumps 22, 24, and 15 as three distinct

pumps with three distinct purposes. Specifically, *Wildenauer* describes each distinct pump as follows:

- “The leaching liquid is pumped by a pump 15' through a conduit 20 into the pipes 10 in the top of the tower 1.” (Col. 6, ll. 64-66).
- “The liquid flow-off 11 from the trough 21 is supplied by a pump 22 through a conduit 23 into an intermediate tank 2.” (Col. 4, ll. 28-30).
- “A further pump 24 between the tank 2 and the bottom 25 of the solid bed reactor 3 is used for controlling the supply of the liquid flow-off 11 into the solid bed reactor 3 through a conduit 26.” (Col. 4, ll. 30-33).

Wildenauer utilizes pumps 22, 24, and 15 to extract “any water soluble organic substances and any water soluble heavy metal salts [from] the leaching liquid containing the solved substances,” (Col. 2, ll. 35-39, 46-50); decompose the organic solved substances “in the solid bed reactor to form a so-called bio-gas,” (Col. 2, ll. 52-55); precipitate the heavy metal compounds “in the solid bed reactor with the aid of sulfur containing substances to form water non-soluble heavy metal sulfides,” (Col. 2, ll. 58-61); and then return any excess “liquid overflow” to the leaching tower along with a replenished supply of leaching liquid, (Col. 2, ll. 61-66).

Thus, it can be seen that *Wildenauer* does not describe “a pump operable to circulate water through the biomass pile by delivering water to the distribution pipe and receiving water from the drain pipe after it has traveled through the biomass pile.” Rather, *Wildenauer* describes a three-pump arrangement operable to convert water soluble organic substances and heavy metal salts into bio-gas and water non-soluble heavy metal sulfides, recycling any excess liquid overflow. Additionally, Applicants are unaware of a disclosure of “a pump operable to circulate water” in any of the other applied references. For at least these reasons, Applicants submit that Independent Claim 1 and its dependents should be allowed. Independent Claim 12 and its dependents should be allowed for analogous reasons.

No Waiver

All of Applicants’ arguments are without prejudice or disclaimer. Applicants reserve the right to discuss the distinctions between the applied art and the claims in a later Response or on Appeal, if appropriate. By not responding to additional statements made by the Examiner, Applicants do not acquiesce to the Examiner’s additional statements. The example distinctions discussed by Applicants are sufficient to overcome the rejections.

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CONCLUSION

Applicants have made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicants respectfully request full allowance of all pending claims.

If the Examiner feels that a telephone conference would advance prosecution of this Application in any manner, the Examiner is invited to contact Ryan S. Loveless, Attorney for Applicant, at the Examiner's convenience at (214) 953-6913.

Although no fees are believed due, the Commissioner is hereby authorized to charge any fees or credit any overpayments to **Deposit Account No. 02-0384 of Baker Botts L.L.P.**

Respectfully submitted,

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Date: September 8, 2008

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